

3/3,AB/1

DIALOG(R)File 351:Derwent WPI

(c) 2003 Thomson Derwent. All rts. reserv.

011468957

WPI Acc No: 1997-446864 /199741

XRAM Acc No: C97-142391

XRPX Acc No: N97-372456

**Production of internal bone implants - involves stage-wise  
plasma-deposition of layers of biologically active coating onto metallic  
titanium base**

Patent Assignee: UNIV SARAT TEKH (UYSA-R)

Inventor: KALGANOVA S G; LYASNIKOV V N; VERESHCHAGINA L A

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No  | Kind | Date     | Applicat No | Kind | Date     | Week     |
|------------|------|----------|-------------|------|----------|----------|
| RU 2074674 | C1   | 19970310 | RU 9430877  | A    | 19940809 | 199741 B |

Priority Applications (No Type Date): RU 9430877 A 19940809

Patent Details:

| Patent No  | Kind | Lan | Pg | Main IPC    | Filing Notes |
|------------|------|-----|----|-------------|--------------|
| RU 2074674 | C1   |     | 3  | A61F-002/28 |              |

Abstract (Basic): RU 2074674 C

The method is based on plasma-deposition of biologically active coating onto metallic titanium base. To improve results, the deposition is conducted in stages, with first layer, in form of titanium or titanium hydride, with a dispersion of 3-5 microns, deposited from the distance 70-80 mm, to the thickness 5-10 microns, second layer in form of titanium or titanium hydride, of dispersity 50-100 microns, deposited from the distance 100 mm, to the thickness of 50-115 mm, third layer in form of mechanical mixture of titanium or titanium hydride of dispersity 40-70 microns, with hydroxyl-apatite of dispersity 5-10 microns, at ratio (wt.%): (60-80):(20-40), respectively, deposited from the distance 80 mm, to the thickness 15-20 microns, and fourth layer consisting of hydroxyl-apatite, of dispersity 40-70 microns, deposited from the distance 70 mm, to the thickness 20-30 microns.

USE - In medicine, especially orthopaedic stomatology, as a method of production of internal bone implants on metallic base.

ADVANTAGE - The method produces bone implants with increased mechanical strength.

Dwg.1/1